

## REMARKS

Claims 1-14, and 23-26 are active. Claims 15 -22 are canceled. Claims 23-26 are new. Claims 2, 5-6, 8, 10-14 and 19-22 (19-22 canceled) are rejected under 35 USC 112, 2<sup>nd</sup> paragr. Claims 7-8 and 15-18 (canceled) are rejected under 35 USC 101. Claims 1-22 (claims 15-22 canceled) are rejected under 35 USC 102 as being anticipated by Bulovic '495.

Amended claims 1-14 and new claims 23-26 are submitted for the Examiner's reconsideration.

### The rejections based on formal matters

Amendment is made to certain of the claims to meet the objections thereto based on formal matters. The Action objects to the term "and/or" in certain of the claims stating it is not clear whether the limitations following the phrase are part of the claimed invention. Applicants object to this construction of the term as being improper. The term "and/or" does not render the claim indefinite and the elements following the clause are part of the claimed invention. The conclusion that it is not clear if they are part of the claimed invention is not understood.

Claim 2, prior to amendment, called for:

so that the flow of ionic current through the electrolyte due to application of a voltage to the conductive material causes a readable change in the conductance and/or color of the organo-resistive material.

It is not understood why this claim is characterized indefinite. All it means is that the voltage applied to the conductive material causes a readable change in one of:

- 1) the conductance of the conductive material
- 2) the conductance of the conductive material and the color of the organo-resistive material, or
- 3) the color of the organo-resistive material

These are alternative structures in plain garden variety English and one of ordinary skill would have no trouble in construing this claim clause as meaning all of the above three alternatives. As can be ascertained from the above, there is no question that the clauses following the objected to term are part of the claim structure. They are merely three alternatives. Such alternatives are acceptable claim structures. Similar terms in the other claims can be construed similarly. However, these claims are amended to eliminate this term to advance the prosecution of this application.

The objected to term "higher" in claims 8 and 19 is corrected in the respective claims as requested. The method claims are amended to meet the objections based on 35 USC 101. Applicants believe that all objections and rejections based on formal matters are met and this basis of the rejection should be withdrawn. The method claims are amended in the interest of clarity and consistency and to improve their form. Certain of the claims, which are redundant in view of the amendments, are canceled. For example amended claim 8 is redundant with claim 19, which is canceled for this reason. Other redundant claims are also canceled.

The substantive rejection of the claims over Bulovic '495.

Claim 1 calls for:

an electrolyte; and  
an organo-resistive material embedded in the electrolyte wherein the storage function of the unit results from the organo-resistive material being embedded in the electrolyte. (underlining added)

The Action states that Bulovic discloses an organo-resistive material embedded in the electrolyte. Applicants traverse this conclusion. The Action states that the active layer 22 is a conjugated chain, Fig. 1a, Fig. 2 and page 7, lines 1-13 and page 8, lines 9-27. This means the layer 22 is the organo-resistive material. The electrolyte is properly characterized by the Action as the NaCl, page 4, paragr. 10a, line 3. It is not understood where there is support for the ultimate conclusion at these cited locations of the reference that the organo resistive material is embedded in the electrolyte as claimed. This is not true. The Action misconstrues the reference.

The layer 22 is the conjugated polymer, i.e., the organo-resistive material. The electrolyte is the ionic matter disclosed as NaCl. See the Action, page 4, line 3 of paragr. 10a, which admits the electrolyte is NaCl. In the ref. Figures, NaCl is distributed within the layer 22 and not vice versa as asserted. See the reference page 7, lines 1-5, stating the "ionic complexes are distributed in the matrix" (the matrix is layer 22, the polymer material, the organo-resistive material-Fig. 2). Therefore, the electrolyte of the reference is embedded in the organo-resistive material layer 22, inapposite to what is claimed.

Amended claim 1 calls for the organo-resistive material to be embedded in the electrolyte, and not vice versa as in the reference. See applicants' Fig. 1. Here it is shown that the organo-resistive layer 2 is embedded in the electrolyte 4 which may be a liquid or a solid for example, see paragraph [0017] of applicants' published application. This structure, corresponding to amended claim 1, is foreign to the reference which shows the opposite, i.e., the electrolyte distributed within the organo-resistive material. These are different and unrelated structures. The remaining references cited of record have been carefully reviewed and are believed equally foreign to amended claim 1.

The Action refers to intended use in claim 1. The Action states that the clause "wherein the storage function of the unit results from the organo-resistive material being embedded in the electrolyte" does not distinguish over the Bulovic structure which is asserted as teaching the claim 1 structure, referring to page 8, lines 8-27, page 9, lines 1-25, Figs. 1a-1d and Fig. 2). As noted above, there is no disclosure in Bulovic that suggests, much less discloses, the amended claim 1 structure wherein the organo-resistive material is embedded in the electrolyte. The Action erroneously states that the storage function of the reference results from the organo-resistive material being embedded in the electrolyte, citing pages noted above. (underlining added)

Applicants disagree. Also applicants disagree that the wherein clause is an intended use as asserted. It is a whereby clause, and as such applicants agree that it is not intended to, and does not in fact, add a further structural limitation to the claim. This clause, being a whereby clause, merely states the operational result of the

structure as claimed. In other words, the unit as claimed performs the stated whereby clause function due to its structure. By embedding the electrolyte in the organo-resistive material, the unit exhibits the noted storage function. This is a correct depiction of the operation of the claimed structure. This operation is not relevant to the intended use conclusion, whatever that may mean and taken out of context of the claim.

However, Bulovic does not disclose nor does it suggest what is claimed. Embedding an electrolyte in an organo-resistive material does not correspond to, suggest and much less, disclose embedding an organo-resistive material in an electrolyte as claimed. These are different and patentably distinguishable structures. For these reasons, amended claim 1 is believed allowable.

Claims 2-14, and 19 depend from claim 1 and are believed allowable for at least the same reasons.

In respect of method claim 7, this depends from claim 1 and is believed allowable for at least the same reasons.

Claim 8 depends from claim 7 and is believed allowable for the same reasons.

New claim 23 calls for:

an electronic organic component comprising organic material

the organo resistive material coupled to the electrolyte is substantially the same material as the organic material of the electronic component

Support for this is in paragraph [0023] of the corresponding published application which states that "the memory is constructed from substantially the same materials as the

organic electronic components themselves.” This structure is novel and is not shown, disclosed or suggested by Bulovic or any other reference cited of record. This claim is believed allowable.

Claim 24 depends from claim 23 and is believed allowable for at least the same reason as claim 23. That is the organo-resistive material is embedded in the electrolyte, not shown or suggested by Bulovic as discussed above.

New claim 25 calls for:

an electrical conductor, said organo-resistive material being separated from the conductor by the electrolyte wherein a voltage applied to the conductor causes a readable change in the color of the organo-resistive material in response to the flow of ionic current through the electrolyte upon said application of the voltage.

Support for this clause is found in original claim 2, wherein this clause is claimed in the alternative as discussed above. This is different than Bulovic in that the Bulovic electrodes A-D are the corresponding conductors and are not disclosed as changing color as claimed nor can applicants locate disclosure that support s such a structure. If the Examiner persists in the rejection of claim 25, he is respectfully requested to point out where in the reference the conductors change color as claimed, because applicants can find no such disclosure. This claim is foreign to Bulovic and the other references cited of record. This claim is believed allowable.

Claim 26 depends from claim 25 and is believed allowable for at least the same reasons as well as for the added structure wherein the organo-resistive material is embedded in the electrolyte, not shown or suggested by Bulovic as discussed above.

Since applicants have shown that claims 1-14, and 23-26 are in proper form for allowance, such action is respectfully requested.

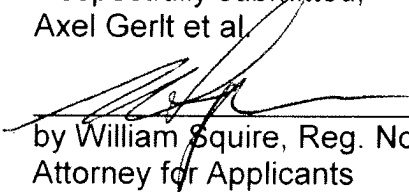
Applicants believe that no fee is due for the claims filed with this paper in that the added claims are compensated for by the cancellation of others of the claims. The originally filed application had one independent claim and now has three independent claims, so no additional fee is due for the amended claims since three independent claims were paid for at the time of filing.

Applicants request a three month extension of time for this paper. The Commissioner is authorized to charge deposit account 03 0678 for the three month extension of time fee \$1050.

If any additional fee is due for this paper, the Commissioner is authorized to charge deposit account 03 0678 for such additional fee or respectively credit this account for any overpayments in connection with this paper.

Date: June 16, 2008

Respectfully submitted,  
Axel Gerlt et al.



by William Squire, Reg. No. 25,378  
Attorney for Applicants

Carella, Byrne, Bain, Gilfillan,  
Cecchi, Stewart & Olstein  
5 becker Farm Road  
Roseland, NJ 07068

Phone: 973-994-1700  
Fax: 973-994-1744